

What is claimed is

1. Multi-component oxide glass composition for use as core of an optical waveguide, said composition comprising
 - a glass former component made of SiO_2 having a concentration of between 30 and 90 mol% and
 - two Raman-active components of Li_2O and Nb_2O_5 in a concentration of up to 50 mol% in total.
2. A composition according to claim 1, further comprising at least one glass modifier component of alkaline or earth-alkaline in a concentration of up to 40 mol%.
3. A composition according to claim 2, wherein said glass modifier component is any of the list Li_2O , Na_2O , K_2O , Rb_2O , Cs_2O , BeO , MgO , CaO , SrO , BaO .
4. A composition according to claim 1, further comprising at least one other oxide component from the list P_2O_5 , B_2O_3 , Al_2O_3 , Ta_2O_5 , V_2O_5 , As_2O_3 , GeO_2 , TiO_2 , ZrO_2 , PbO , Bi_2O_3 , Mo_2O_3 , WO_3 , SnO_2 , Sb_2O_3 , Ga_2O_3 , In_2O_3 , TeO_2 in a concentration of up to 40%.
5. A composition according to claim 1, further comprising at least one sulfide component in minor concentration.

6. An Raman-active optical fiber having a core with an higher refractive index and a cladding with a lower refractive index, said core comprising a multi-component oxide glass composition comprising

- a glass former component made of SiO_2 having a concentration of between 30 and 90 mol% and
- two Raman-active components of Li_2O and Nb_2O_5 in a concentration of up to 50 mol% in total.

7. A fiber according to claim 6, wherein said inner cladding is made of silicate glass.

8. A fiber according to claim 6, having areas comprising small LiNbO_3 crystallization particles induced by heat treatment of the fiber.

9. An optical device comprising a Raman-active optical fiber, said fiber having a core with an higher refractive index and an cladding with a lower refractive index, said core comprising a multi-component oxide glass composition comprising

- a glass former component made of SiO_2 having a concentration of between 30 and 90 mol% and
- two Raman-active components of Li_2O and Nb_2O_5 in a concentration of up to 50 mol% in total.

10. An optical device according to claim 9 being a Raman amplifier or laser comprising a pump source coupled to said Raman-active fiber.